## EcoRA Conference Call - January 6, 2000, 9 AM - 10 AM

#### Participants:

Dana Houkal, URS
Steve Hughes, URS
Mary Jane Nearman, EPA
John Roland, Ecology
Julie Campbell, USFWS
Harry Ohlendorf, CH2M Hill
Sarah Bigger, Sen. Crapo's Office
Anne Dailey, EPA
Michelle Nanni, Land's Council
Phil Cernera, CDA Tribe
Bill Beckly, Ridolfi

Tom Dahl, Dahl Assoc.
Dan Winstanley, CH2M Hill
Don Heinle, CH2M Hill
Matt Kadlec, Ecology
Jeff Fromm, IDEQ
George Brabb, CAC RI/FS Task Force
Merril Coomes, Coomes Assoc.
Joe Goulet, EPA
Kate LeJeune, Stratus Consulting
Dick Martindale, EPA
Eric Doyle, URS

### Ecological status and objectives:

- Discussion focused on follow-up of the ecological status and objectives concepts for the CDA Basin RI/FS. Text previously distributed by Dailey provided the foundation for the discussion (see E-mail dated 12/23/99).
- A key component of the EcoRA is identifying the current conditions of habitats in the CSM segments and identifying reasonable goals for the remediation efforts. The eco status and objectives process is how this being done.
- The CSM (dated Nov. '98) provided a subjective evaluation of ecological status and goals. As a result of input at the EcoRA Workgroup meeting on Nov. 4-5, 1999, and subsequent teleconferences, EPA now intends to make assessments of the current ecological status based upon a set of metrics which capture important physical, chemical, and biological characteristics of a given habitat/CSM segment. Bases for the ecostatus metrics will be available EPA/URS/CH Coeur d'Alene data, Idaho and Washington data, Trustee data, applicable information from the literature, and other available data. The output of the ecostatus evaluation will be used in the Feasibility Study to evaluate candidate remedial alternatives.
- The EcoRA team is working with the FS team to ensure that eco status information is provided in a form and time frame that will be useful in evaluation of the remedial alternatives. The ecostatus input to the candidate alternatives will help determine the proposed plan and preferred alternative.
- The EcoRA is now at the analysis phase of risk assessment. Chemical piece is relatively straight forward can look at concentrations in media and compare to standards. The biological and physical parameters are somewhat less straightforward but need to be part of comparison. All of the metrics will be combined

for a weight of evidence approach (including background, mining sources, bio/physical impacts directly/indirectly related to mining, non-mining related impacts [e.g., high way construction, development] and so forth)

- Intent is to use above information to evaluate the remedial alternatives to address impacts from mining activities.
- Matt Kadlec noted the analysis should be done in a quantitative manner to the extent possible. Also suggested expanding the list of metrics since some are effected by other stressors. When info is not available, very old, or not detailed enough then use best professional judgment (BPJ) and clearly identify the use of BPJ.
- George Brabb suggested that use of best professional judgment could be reduced by getting information directly from sources of data such as the fisheries information, forest service data.
- It was noted that because the US Forest Service has limited land in the area of coverage and because there are some models/data but it is not readily accessible, therefore much of the assessment on forest lands will need to be done qualitatively
- Merril Coomes needs a copy of the problem formulation (sent to him on 1/6/00)
- offered to send a BLM reference on riparian habitat; will send to Dailey (these are included at the end of the notes for this call)
- encouraged a close link with the FS team to ensure that appropriate information is included in the analysis. Indicated that we are presently doing this via links between contractor teams and having overlapping personnel.
- Metric sources will be provided to the FS team so that they can use that information to evaluate candidate remedial alternatives (e.g., 60% of a river bank is unstable in a given area -> this will help guide remedial alternative selection to address bank instability/erosion)
- The ecostatus evaluation and general evaluation of the eco impacts of mining will be in the EcoRA. These will be in more detail in the EcoRA but will be translated to FS in a summary fashion but with the details readily available. The remedial action objectives (RAO) and general response actions are key to the FS and need to be part of the FS. May be difficult to separate mining-related from non-mining-related impacts...intend to make a qualitative statements about what is a mining-related and non-mining-related impacts (bed load stabilization, bank stability, etc.) for various segments. Hope to be able to make an assessment of improvement to metrics with various remedial alternatives using a range of metrics and potentials for improvement.
- Julie Campbell asked when FWS and others may get a chance to see some interim deliverables for the EcoRA prior to issuance of the draft EcoRA in March. Dailey

indicated that the draft TRVs would be available for review late the week of Jan. 10 in advance of the Jan. 20 EcoRA teleconference. Dailey is meeting with EPA's contractors tomorrow to clarify details regarding completion of the EcoRA and anticipates have specific information to share soon regarding this. In addition physical and biological metrics are largely done and could be shared with folks soon. —>(Later update: EPA also anticipates having an outline of the EcoRA report available to share with the EcoRA workgroup in late January. The outline would include table of contents, lists of figures/tables/maps, further definition of the ecostatus metric and linkage with the FS).

### Other Issues:

- The bull trout toxicity testing report is final and hard copies were distributed to an extensive distribution list. Copies of the report are also available in the information repositories in the CDA basin and in EPA's Superfund Record Center.
- These tests were conducted to address a lack of data on bull trout's (a threatened species under ESA) sensitivity to heavy metals.
- Results from the toxicity tests indicate that bull trout are more tolerant of cadmium and zinc exposures than rainbow trout. The acute toxicity tests indicate that the lethality threshold for cadmium and zinc at low hardness is near or slightly below the applicable Aquatic Life Criterion. Chronic test results indicate reduced growth and lethality responses in bull trout at a cadmium concentration less than the national criteria at low hardness.

Schedule updates - draft EcoRA scheduled to be out for review in early-mid March. Plan to have a workshop in CDA to discuss the draft EcoRA in early April. Dates to be defined soon - likely the first week of April.

- Dailey noted that CSM 5 for the Spokane River is currently under development by EPA contractors. Materials provided by John Roland and Matt Kadlec has been very helpful in development of CSM 5.
- As requested, Dailey will send copies of the Draft Problem Formulation document (Oct. 99) to Merril Coomes and George Brabb. (Done 1/6/2000)

#### Next EcoRA call:

- Next EcoRA call will be on January 20, 2000 at 9 AM PST (call in number is 206-553-4602; no pass code); subject of discussion will be the draft threshold reference values (TRVs). Documentation will be provided to the EcoRA work group no later than a week prior to the teleconference on the 20<sup>th</sup>.

# References supplied by Merril Coomes via fax to Anne Dailey:

- Inventory and monitoring of wildlife habitat. BLM. Sept. 1986.
- Riparian Area Survey and Evaluation System (RASES). US Dept. of Agriculture, Forest Service, Southwest Region. July 1989.
- Riparian Area Management Process for assessing proper functioning condition. BLM Report # TR 1737-9. 1993.
- Riparian Area Management Process for assessing proper functioning condition for lentic riparian-wetland areas. BLM Report # TR 1737-11. 1994.
- Risk Management Criteria for metals at BLM mining sites. BLM Technical note 390. September 1994.